

**AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions of claims in the application.

1. (Currently Amended) An ozone gas detection indicator, comprising a color changing layer formed of an ink composition for detecting an ozone gas,

wherein the ink composition for detecting an oxidizing gas, comprising ozone gas comprises at least one selected from the group consisting of azo dye, ~~methine dye~~, methine dye ~~and triaryl methane dye and thiazine dye~~, and

a cationic surfactant.

2. (Canceled)

3. (Currently Amended) ~~The ink composition for detecting an oxidizing gas~~ The ozone gas detection indicator according to claim 1, wherein the cationic surfactant is at least one selected from the group consisting of an alkyl trimethyl ammonium salt, isoquinolinium salt, imidazolinium salt and pyridinium salt.

4. (Currently Amended) ~~The ink composition for detecting an oxidizing gas~~ The ozone gas detection indicator according to claim 1, which further comprises at least one selected from the group consisting of extender and resin binder.

5. (Currently Amended) ~~The ink composition for detecting an oxidizing gas~~ The ozone gas detection indicator according to claim 1, which further comprises at least one type of colorant which does not change color in an oxidizing gas atmosphere.

6. (Currently Amended) ~~The ink composition for detecting an oxidizing gas~~ The ozone gas detection indicator according to claim 1, which further comprises an anthraquinone dye as a dye.

7. (Canceled).

8. (Currently Amended) The ~~oxidizing ozone~~ gas detection indicator according to ~~claim 7~~ claim 1, which further comprises a non-color changing layer which does not change color in an oxidizing gas atmosphere.

9. (Currently Amended) An indicator for detecting hydrogen peroxide plasma sterilization, comprising a color changing layer formed of an ink composition, which has a plurality of cracks in the surface of the color changing layer,  
~~wherein the ink composition for detecting hydrogen peroxide plasma sterilization,~~  
~~comprising: comprises:~~

- 1) at least one selected from the group consisting of azo dye and methine dye,
- 2) a nitrogen-containing polymer, ~~and~~
- 3) a cationic surfactant, and
- 4) a resin binder, wherein all or a portion of the resin binder is a cellulose resin.

10. (Currently Amended) ~~The ink composition~~ The indicator according to claim 9, wherein all or a portion of the nitrogen-containing polymer is a polyamide resin.

11. (Currently Amended) ~~The ink composition~~ The indicator according to claim 10, wherein the polyamide resin is a reaction product of a dimer of linoleic acid and a di- or polyamine.

12. (Currently Amended) ~~The ink composition~~ The indicator according to claim 9, wherein the cationic surfactant is at least one selected from the group consisting of an alkyl trimethyl ammonium salt, isoquinolinium salt, imidazolinium salt and pyridinium salt.

13. (Currently Amended) ~~The ink composition~~ The indicator according to claim 9, which further comprises ~~at least one selected from the group consisting of extender and resin binder~~ an extender.

14. (Canceled)

15. (Currently Amended) ~~The ink composition~~ The indicator according to claim 13, wherein all or a portion of the extender is silica.

16. (Currently Amended) ~~The ink composition~~ The indicator according to claim 9, wherein the content of the nitrogen-containing polymer is 1 to 20% by weight of the ink composition.

17. (Currently Amended) ~~The ink composition~~ The indicator according to claim 9, which further comprises at least one type of colorant which does not change color in a plasma sterilization treatment atmosphere.

18. (Currently Amended) ~~The ink composition~~ The indicator according to claim 9, which further comprises at least one type of component which changes color by reacting with hydrogen peroxide.

19. (Currently Amended) ~~The ink composition~~ The indicator according to claim 18, wherein the component which changes color by reacting with hydrogen peroxide contains ammonium aurintricarboxylate.

20. (Currently Amended) ~~The ink composition~~ The indicator according to claim 9, which further comprises at least one type of organic amine.

21-22. (Canceled)

23. (Currently Amended) The indicator according to ~~claim 24~~ claim 9, which further comprises a non-color changing layer which does not change color in a plasma sterilization treatment atmosphere.

24. (Currently Amended) The indicator according to ~~claim 24~~ claim 9, which further comprises a colored layer which changes color in a hydrogen peroxide atmosphere.

25. (Original) The indicator according to claim 24, wherein the colored layer and the color changing layer are formed so as to be mutually overlapping.

26. (Original) The indicator according to claim 25, wherein the colored layer and the color changing layer are formed in a linear or spotted pattern so as not to be mutually overlapping.

27. (Currently Amended) A pouch for hydrogen peroxide plasma sterilization provided with the indicator according to ~~claim 24~~ claim 9 on an inner surface of a gas-permeable pouch.

28. (Original) The pouch according to claim 27, which is provided with a transparent window in a portion of the pouch so as to allow visual confirmation of the indicator from the outside.

29. (Original ) The pouch according to claim 27, wherein the gas-permeable pouch is formed from polyethylene fibers.

30. (Currently Amended) A hydrogen peroxide plasma sterilization treatment method, comprising the steps of loading a treated material into the pouch according to ~~claim 21~~ claim 27, sealing the pouch with the treated material loaded therein, and placing the pouch in a hydrogen peroxide plasma sterilization atmosphere.

31. (Original) The method according to claim 30, wherein the pouch is placed in the hydrogen peroxide plasma sterilization atmosphere until the color changing layer of the indicator changes color.

32. (Currently Amended) A method for confirming hydrogen peroxide plasma sterilization treatment, comprising the steps of loading a treated material into the pouch according to ~~claim 21~~ claim 27, sealing the pouch with the treated material sealed therein, placing the pouch in a hydrogen peroxide plasma sterilization atmosphere, and confirming a color difference in the indicator of the pouch.

33. (New) A hydrogen peroxide gas detection indicator, comprising a color changing layer formed of an ink composition for detecting a hydrogen peroxide gas,  
wherein the ink composition for detecting a hydrogen peroxide gas comprises methine dye and a cationic surfactant.